

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

McAnalley et al.

Serial No. 10/797,344

Filed: March 10, 2004

For: COMPOSITIONS OF PLANT
CARBOHYDRATES AS
DIETARY SUPPLEMENTS

SGroup Art Unit: 1654

Examiner: N/A

Confirmation No.: 4291

SGROUP Art Unit: 1654

Confirmation No.: 4291

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner For Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In compliance with the duty of disclosure under 37 CFR §1.56, and in accordance with the practice under 37 CFR §1.97 and §1.98, the Examiner's attention is directed to the documents listed on the enclosed modified Form PTO-1449. No inference should be made that the cited references are in fact material, are in fact prior art, or that no better art exists. The cited patents are listed in numerical order and are not in any order based on their pertinence.

Pursuant to 37 CFR §1.98(d), no copies of the cited references are enclosed since the references were provided in the parent application, U.S. Serial No. 09/242,215.

It is requested that the Examiner fully consider the cited references and that they be cited on the front of any patent issuing from this application.

An early action on the merits is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required or credit any overpayment to Deposit Account 08-1394.

It is respectfully requested that the above information be considered by the Examiner and that a copy of the enclosed Form PTO-1449 be returned indicating that such information has been considered.

Respectfully submitted,

Randall C. Brown

Registration No. 31,213

Date: July 6,2604
HAYNES AND BOONE, LLP
901 Main Street, Suite 3100
Dallas, Texas 75202-3789
Telephone: 214-651-5242
Facsimile: 214-200-0853

File: 23100.64

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on _______.

Printed Name

 ω

In place of PTO-1449 Form

SHEET

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

OF

10

JUL 0 8 2004

INFORMATION DESCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

5,827,526

Complete if Known					
Application Number 10/797,344					
Filing Date	March 10, 2004				
Applicant(s)	McAnalley et al.				
Art Unit	1654				
Examiner Name	Unknown				
Attorney Docket Number	23100.64				

	U. S. PATENT DOCUMENTS								
Examiner's	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document					
Initials	No.	3,890,438	6/1975	Cayen et al.					
		3,947,601	3/1976	Ortega					
		4,260,603	4/1981	Pegel et al.					
		4,466,958	8/1984	Morrison					
		4,593,046	6/1986	Gruber					
		4,665,057	5/1987	Nelson et al.					
		4,777,045	10/1988	Vanderveer et al.					
		4,837,040	6/1989	Yokoyama et al.					
		4,859,488	8/1989	Kan et al.					
		4,855,284	8/1989	Emoedi					
		4,871,557	10/1989	Linscott					
		5,021,560	6/1991	Montreuil et al.					
		5,106,616	4/1992	McAnalley et al.					
		5,202,122	4/1993	Graves et al.					
-	-	5,229,118	7/1993	Campbell					
		5,292,729	3/1994	Ashmed					
		5,294,434	3/1994	King et al.					
		5,296,245 A	03/1994	Clarke et al.					
		5,308,838	5/1994	McAnalley et al.					
		5,308,618	5/1994	Konno et al.					
		5,378,480	1/1995	Carieri					
		5,487,894 A	01/1996	Kovacs, Joseph					
		5,523,087 A	06/1996	Shlyankevich, Mark					
	_	5,607,693	3/1997	Bonte et al.					
		5,612,039	3/1997	Policappelli et al.					
		5,710,270	1/1998	Maeda et al.					

FOREIGN PATENT DOCUMENTS													
Examiner's Initials	Cite No.	Foreign Patent Publication Date Pater Document MM-DD-YYYY (Country Code - Number - Kind)		Cite Foreign Patent Publication Date Pate No. Document Publication Date Pate (County Code - Number - Kind)		Cite Foreign Patent Publication Da No. Document (Country Code – Number – Kind) MM-DD-YYYY		Cite Foreign Patent Publication Do No. Document MM-DD-YYYY (Courty Code - Number - Kind)		Cite Foreign Patent Publication No. Document Publication MM-DD-Y		Patentee or Applicant of Cited Document	Translation YN
		WO 9506068 A1	03/1995	YAMADA et al.									
		WO 9303727	04/1993	Hilsted	,								
		JP 57/007,420	1/1982										
		EP 0052171	5/1982										
		JP 59/112,922	6/1984										
		DE 3935906	5/1991										
		WO 91 15214	10/1991		_								
		JP 03/255,029	11/1991										
		JP 07/242,551	9/1995										
		NZ 299,607	3/1997										
		RU 2097041	11/1997										
		WO 98 06418	2/1998										
		JP 63294766 A	12/1988	TAMAI, SEIJI									

Dohnalek et al.

10/1998

Examiner Date Signature Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

In place of PTO-1449 Form			F COMMERCE MARK OFFICE		Complete if Known
				Application Number	10/797,344
INFO	RMATION D	ISCLO	SURE	Filing Date	March 10, 2004
STAT	TEMENT BY	APPL	ICANT	Applicant(s)	McAnalley et al.
(u	se as many sheets	as neces	sary)	Art Unit	1654
				Examiner Name	Unknown
SHEET	2	of	10	Attorney Docket Number	23100.64

		OTHER PRIOR ART					
Examiner's Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article, title of the item, date, page(s), volume-issue number(s), publisher, city/country where published					
		Citkowitz, E., Developmental Biology (1972), 27: 494-503. "Analysis of the Isolated Hyaline Layer of Sea Urchin Embryos."					
		Balch, J.F. et al., "Prescription for Nutritional Healing", 2 nd ed. (1997), Avery Publishing Group(USA), Pg. 7-8, 12-33 and 43-46.					
		Bartolome, A.P. et al., J. Agric. Food Chem.(1995), 43: 608-612, "Polysaccharides from the Cell Walls of Pineapple Fruit."					
		Alton, Gordon et al., "Direct Utilization of Mannose for Mammalian Glycoprotein Biosysnthesis", Glycobiology (1998) 8:3, 285-295.					
	Berger, Veronique et al., "Dietary Specific Sugars for Serum Protein Enzymatic Glycos Man", Metabolism (1998) 47:12, 1499-1503.						
- 11	:	Freeze, Hudson, "Disorders in Protein Glycosylation and Protein Therapy: Tip of an Iceberg?" The Journal of Pediatrics (11/1998) 133:5, 593-600.					
		Gardiner, Tom et al., "Glyconutritionals: Consolidated Review of Potential Benefits", GlycoScience & Nutrition (7/2001) 2:15, 1-15.					
	·	Martin, A. et al., "Availability of Specific Sugars for Glycoconjugate Biosynthesis: A Need for Further Investigations in Man", Biochimie (1998) 80:1, 75-86.					
	-	Rosalind Kornfeld and Stuart Kornfeld, "Assembly of Asparagine-Linked Oligosaccharides," Ann. Rev. Biochem., 1985, Vol. 54, Pages 631-64.					
	:	Akira Kobata, "Structures and Functions of The Sugar Chains of Glycoproteins," Eur. J. Biochem., 1992, Vol. 209, Pages 483-501.					
		Murray et al,. Harper's Biochemistry, Appleton & Lange, 1996, Pages 648-49.					
		J.H. Cummings et al., "A New Look at Dietary Carbohydrate: Chemistry, Physiology and Health," Eur. J. Clinical Nutrition, 1997, Vol. 51, Pages 417-23.					
		Alan D. Elbein, "Inhibitors of the Biosynthesis and Processing of N-Linked Oligosaccharide Chains," Ann. Rev. Biochem., 1987, Vol. 56, Pages 497-534.					
Examiner Signature		Date Considered					

In place of PTO-1449 Form			OF COMMERCE MARK OFFICE		Complete if Known	
				Application Number	10/797,344	
INFO	RMATION	DISCL	OSURE	Filing Date	March 10, 2004	
STAT	EMENT B	Y APPI	LICANT	Applicant(s)	McAnalley et al.	
(us	e as many she	ets as nece	ssary)	Art Unit	1654	
				Examiner Name	Unknown	
SHEET	3	of	10	Attorney Docket Number	23100.64	

_	OTHER PRIOR ART							
Examiner's Cite Initials No.	Include name of the author (in CAPITAL LETTERS), title of the article, title of the item, date, page(s), volume-issue number(s), publisher, city/country where published							
	Alan D. Elbein, "Inhibitors of the Biosynthesis and Processing of N-Linked Oligosaccharide Chains," Ann. Rev. Biochem., 1987, Vol. 56, Pages 497-534.							
	Richard L. Jackson et al., "Glycosaminoglycans: Molecular Properties, Protein Interactions, and Role in Physiological Processes," Physiological Reviews, 1991, Vol. 71, No. 2, Pages 481-539.							
	Arthur D. Lander, "Proteoglycans in the Nervous System," Current Opinion in Neurobiology, 1993, Vol. 3, Pages 716-23.							
	Guido David, "Structural and Functional Diversity of the <u>Heparan Sulfate Proteoglycans</u> ," Heparin and Related Polysaccharides, Plenum Press, 1992, Pages 69-78.							
	Geraldine McDowell and William A. Gahl, "Inherited Disorders of Glycoprotein Synthesis: Cell Biological Insights," Society for Experimental Biology and Medicine, 1997, Vol. 215, Pages 145-57.							
	Leon Carayannopoulos and J. Donald Capra, "Immunoglobulins: Molecular Genetics," Fundamental Immunology, Third Edition, Raven Press, 1993, Pages 302-14.							
	Royston Jefferis et al., "Glycosylation Heterogeneity in Human IgG Subclass Proteins," Biochemical Society Transactions, 1998, Vol. 16, Pages 340-41.							
	Mi-Hua Tao et al., "Studies of Aglycosylated Chimeric Mouse-Human IgG: Role of Carbohydrate in the Structure and Effector Functions Mediated by the Human IgG Constant Region," The Journal of Immunology, 1989, Vol. 143, Pages 2595-2601.							
	Scot Hickman and Stuart Kornfeld, "Effect of Tunicamycin on IgM, IgA, and IgG Secretion By Mouse Plasmacytoma Cells," The Journal of Immunology, 1978, Vol. 121, No. 3, Pages 990-96.							
	G. Doria et al., "Age-Dependent Variations of Antibody Avidity," Immunology, 1978, Vol. 35, Pages 601-11.							
	Hironori Matsuda et al., "Proton Nuclear Magnetic Resonance Studies of the Structure of the Fc Fragment of Human Immunoglobulin G1: Comparisons of Native and Recombinant Proteins," Molecular Immunology, 1990, Vol. 27, No. 6, Pages 571-79.							
	Norio Koide et al., "Recognition of IgG by Fc Receptor and Complement: Effects of Glycosidase Digestion, "Biochemical and Biophysical Research Communications, 1977, Vol. 75, No. 4, Pages 838-44.							
	John Lund et al., "A Protein Structural Change in Aglycosylated IgG3 Correlates with Loss of huFcyR1 and huFcyR111 Binding And/Or Activation," Molecular Immunology, 1990, Vol. 27, Pages 1145-53.							
Examiner	Date							
Signature	Considered							

In place of PTO-1449 Form			OF COMMERCE MARK OFFICE		Complete if Known
				Application Number	10/797,344
INFO	RMATION	DISCLO	OSURE	Filing Date	March 10, 2004
STA	TEMENT B	Y APPL	ICANT	Applicant(s)	McAnalley et al.
II .	se as many she			Art Unit	1654
				Examiner Name	Unknown
SHEET	4	of	10	Attorney Docket Number	23100.64

	·	OTHER PRIOR ART							
Examiner's	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article, title of the item, date, page(s), volume-issue number(s), publisher, city/country where published							
Initials	INO.	Johann Deisenhofer et al., "Crystallographic Structural Studies of a Human Fc Fragment, "Hoppe-							
		Seyler's Z. Physiol. Chem., 1976, Vol. 357, Pages 1421-1434.							
-		Jeffrey C. Edberg and Robert P. Kimberly, "Cell Type-Specific Glycoforms of FcyR111a (CD 16), "The American Association of Immunologists, 1997, Pages 3849-57.							
	·	W. Ludo van der Pol and Jan G.J. van de Winkel, "IgG Receptor Polymorphisms: Risk Factor for Disease," Immunogenetics, 1998, Vol. 48, Pages 222-32.							
		Kelly P. Kearse and Gerald W. Hart, "Topology of O-Linked N-Acetylglucosamine in Murine Lymphocytes," Archives of Biochemistry and Biophysics, November 1991, Vol. 290, No. 2, Pages 543-48.							
		M.R. Sairam, "Role of Carbohydrates in Glycoprotein Hormone Signal Transduction," The FASEB Journal, June 1989, Vol. 3, Pages 1915-1926.							
		C.A. Wilson et al., "Gonadotrophin glycosylation and function," Journal of Endocrinology, 1990, Vol. 125, Pages 3-14.							
		M.R. Sairam et al., "Mechanism of Gonadotropin Action-Dissociation of Receptor Binding and Cellular Activation," Progress in Endocrinolgy, 1988, Pages 1025-1031.							
		Albert S. B. Edge et al., "Insulin Receptor Carbohydrate Units Contain Poly-N-Acetyllactosamine Chains," Endocrinology, 1990, Vol. 127, No. 4, Pages 1887-1895.							
:		Kim A. Heidenreich et al., "Structural Differences Between Insulin Receptors in the Brain and Peripheral Target Tissues," The Journal of Biological Chemistry, 1983, Vol. 258, No. 14, Pages 8527-8530.							
	-	Elaine Collier et al., "Specific Glycosylation Site Mutations of the Insulin Receptor α Subunit Impair Intracellular Transport," Biochemistry, 1993, Vol. 32, Pages 7818-7823.							
		Paola Briata et al., "Glucose Starvation and Glycosylation Inhibitors Reduce Insulin Receptor Gene Expression: Characterization and Potential Mechanism in Human Cells," Biochemical and Biophysical Research Communications, 1990, Vol. 169, No. 2, Pages 397-405.							
		Stephen P. Jackson and Robert Tjian, "Purification and Analysis of RNA Polymerase II Transcription Factors by Using Wheat Germ Agglutinin Affinity Chromatography," Proc. Natl. Acad. Sci., USA, March 1989, Vol. 86, Pages 1781-1785.							
	,	Serge Lichtsteiner and Ueli Schibler, "A Glycosylated Liver-Specific Transcription Factor Stimulates Transcription of the Albumin Gene," Cell, 1989, Vol. 57, Pages 1179-1187.							
Examiner Signature		Date Considered							

In place of PTO-1449 Form			F COMMERCE MARK OFFICE		Complete if Known
FOIII				Application Number	10/797,344
INFO	RMATION D	ISCLO	SURE	Filing Date	March 10, 2004
i	EMENT BY			Applicant(s)	McAnalley et al.
(u:	se as many sheets	as neces	sary)	Art Unit	1654
				Examiner Name	Unknown
SHEET	5	of	10	Attorney Docket Number	23100.64

	OTHER PRIOR ART						
Examiner's Ci	le Include name of the author (in CAPITAL LETTERS), title of the article, title of the item, date, page(s), volume- issue number(s), publisher, city/country where published						
illuais iv	Rüdiger Göke et al., "Glycosylation of the GLP-1 Receptor Is a Prerequisite for Regular Receptor						
	Function," Peptides, 1994, Vol. 15, No. 4, Pages 675-681.						
	David A. Jans et al., "N-Glycosylation Plays a Role in Biosynthesis and Internalization of the Adenylate Cyclase Stimulating Vasopressin V ₂ -Receptor of LLC-PK ₁ Renal Epithelial Cells: An Effect of Concanavalin A on Building and Expression," Archives of Biochemistry and Biophysics, 1992, Vol. 294, No. 1, Pages 64-69.						
	Stuart Kornfeld, "Trafficking of Lysosomal Enzymes," The FASEB Journal, 1987, Vol. 1, Pages 462-468.						
	Peter Walter et al., "Protein Translocation Across The Endoplasmic Reticulum," Cell, 1984, Vol. 38, Pages 5-8.						
	Pauline M. Rudd et al., "Glycoforms Modify the Dynamic Stability and Functional Activity of an Enzyme," Biochemistry, 1994, Vol. 33, Pages 17-22.						
	Pauline M. Rudd et al., "The Effects of Variable Glycosylation on the Functional Activities of Ribonuclease, Plasminogen and Tissue Plasminogen Activator," Biochimica et Biophysica Acta, 1995, Vol. 1248, Pages 1-10.						
	C.P. Ponting et al., "Plasminogen: A Structural Review,: Blood Coagulation and Fibrinolysis, 1992, Vol. 3, Pages 605-614.						
	Mark W. C. Hatton et al., "Catabolism of Plasminogen Glycoforms I and II in Rabbits: Relationship to Plasminogen Synthesis by the Rabbit Liver In Vitro," Metabolism, 1994, Vol. 43, No. 11, Pages 1430-1437.						
	Donald J. Davidson et al., "The Influence of the Nature of the Asparagine 289-linked Oligosaccharide on the Activation by Urokinase and Lysine Binding Properties of Natural and Recombinant Human Plasminogens," J. Clin. Invest., July 1993, Vol. 92, Pages 249-254.						
	Susan C. Howard et al., "Oligosaccharides at each Glycosylation Site Make Structure-Dependent Contributions to Biological Properties of Human Tissue Plasminogen Activator," Glycobiology, 1991, Vol. 1, No. 4, Pages 411-417.						
	Eric Duverger et al., "Sugar-Dependent Nuclear Import of Glycoconjugates from the Cytosol," Experimental Cell Research, 1993, Vol. 207, Pages 197-201.						
	Robert S. Haltiwanger et al., "O-Glycoslation of Nuclear and Cytoplasmic Proteins: Regulation Analogous to Phosphorylation?" Biochemical and Biophysical Research Communications, 1997, Vol. 231, No. 2, Pages 237-242.						
Examiner Signature	Date Considered						

In place of PTO-1449 Form			OF COMMERCE EMARK OFFICE		Complete if Known
				Application Number	10/797,344
INFO	RMATION	DISCL	OSURE	Filing Date	March 10, 2004
STA ⁻	TEMENT B	Y APP	LICANT	Applicant(s)	McAnalley et al.
(u	se as many she	ets as nece	essary)	Art Unit	1654
				Examiner Name:	Unknown
SHEET	6	of	10	Attorney Docket Number	23100.64

	OTHER PRIOR ART
Examiner's Cit	
initials No	issue number(s), publisher, city/country where published Frank I. Comer and Gerald W. Hart, "Dynamic Glycosylation of RNA Polymerase II," Molecular Biology of the Cell Abstracts, Abstract 2414, 1995, Page 415a.
	Arup Chakraborty et al., "Regulation of eIF-2 α-Subunit Phosphorylation in Reticulocyte Lysate," Biochemistry, 1994, Vol. 33, Pages 6700-6706.
	David M. Kingsley et al., "Reversible Defects in O-Linked Glycosylation and LDL Receptor Expression in a UDP-Gal/UDP-GalNAc 4-Epimerase Deficient Mutant," Cell, March 1986, Vol. 44, Pages 749-759.
	Takashi Yoshida et al., "Altered Function and Structure of Low-Density Lipoprotein Receptor in Compactin (ML236B)-Resistant Mutants of Chinese Hamster Cells," Biochimica et Biophysica Acta, 1987, Vol. 921, Pages 575-586.
	Karen Kozarsky et al., "Use of a Mutant Cell Line to Study the Kinetics and Function of O-Linked Glycosylation of Low Density Lipoprotein Receptors," Proc. Natl. Acad. Sci. USA, 1988, Vol. 85, Pages 4335-4339.
	Kermit L. Carraway et al., "Cell Surface Mucin-Type Glycoproteins and Mucin-Like Domains," Glycobiology, 1991, Vol. 1, No. 2, Pages 131-138.
	Christopher G. Tate and Randy D. Blakely, "The Effect of N-Linked Glycosylation on Activity of the Na+ - and C1- Dependent Serotonin Transporter Expressed Using Recombinant Baculovirus in Insect Cells," The Journal of Biological Chemistry, 1994, Vol. 269, No. 42, Pages 26303-26310.
	Malgorzata M. Zaleska and Maris Erecinska, "Involvement of Sialic Acid in High-Affinity Uptake of Dopamine by Synaptosomes from Rat Brain," Neuroscience Letters, 1987, Vol. 82, Pages 107-112.
	Jaak Jaeken et al., "The Carbohydrate-Deficient Glyoprotein Syndromes: Pre-Golgi and Golgi Disorders?" Glycobiology, 1993, Vol. 3, No. 5, Pages 423-428.
	K. Panneerselvam and Hudson H. Freeze, "Mannose Corrects Altered N-Glycosylation in Carbohydrate-Deficient Glycoprotein Syndrome Fibroblasts," J. Clin. Invest., March 1996, Vol. 97, No. 6, Pages 1478-1487.
	Gordon Alton et al., "Oral Ingestion of Mannose Elevates Blood Mannose Levels: A First Step Toward Potential Therapy for Carbohydrate-Deficient Glycoprotein Syndrome Type 1," Biochemical and Molecular Medicine, 1997, Vol. 60, Pages 127-133.
	Ralf Niehues et al., "Carbohydrate-Deficient Glycoprotein Syndrome Type 1b," J. Clin. Invest., April 1998, Vol. 101, No. 7, Pages 1414-1420.
Examiner Signature	Date Considered

In place of PTO-1449 Form	4. 4. 4. 4. . .		F COMMERCE MARK OFFICE		Complete if Known
				Application Number	10/797,344
INFO	RMATION D	DISCLO	SURE	Filing Date	March 10, 2004
STATEMENT BY APPLICANT				Applicant(s)	McAnalley et al.
(u	se as many sheets	s as neces:	sary)	Art Unit	1654
				Examiner Name	Unknown
SHEET	7	of	10	Attorney Docket Number	23100.64

		OTHER PRIOR ART		
Examiner's Initials	Cite No.	include name of the author (in CAPITAL LETTERS), title of the articles issue number(s), publisher, city/country w	here published	4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
		K. Panneerselvam et al., "Abnormal Metabolism of Mannose Deficient Glycoprotein Syndrome Type 1, "Biochemical and Pages 161-167.		
	-	Taco W. Kuijpers, et al., "Antigen-Specific Immune Respons Recruitment In Leukocyte Adhesion Deficiency Type II," Int 9, No. 4, Pages 607-613.		
		A. Bond, et al., "The Relationship Between Exposed Galacto Residues On IgG in Rheumatoid Arthritis (RA), Juvenile Chr Syndrome (SS)," Clin. Exp. Immunol., 1996, Vol. 105, Pages	ronic Arthritis (.	
		Rajneesh Malhotra, et al., "Glycosylation Changes of IgG As Can Activate Complement Via the Mannose-Binding Protein Vol. 1, No. 3, Pages 237-243.		
	-	Katsuko Yamashita, et al., "Altered Glycosylation of Serum" Hepatocellular Carcinoma," The Journal of Biological Chem 2415-2423.		
		D. Biou, et al., "Microheterogeneity of the Carbohydrate Mo Glycoprotein in Two Benign Liver Diseases: Alcoholic Cirrh Chimica Acta, 1989, Vol. 186, Pages 59-66.		
		Noriaki Kinoshita, et al., "α-Fetoprotein Antibody-Lectin Engar Chains for the Study of Liver Diseases," Clinica Chim 152.		
		S. Thompson, et al., "Fucosylated forms of alpha-1 antitryps: chemotherapy in ovarian cancer," Br. J. Cancer, 1988, Vol. 5		
		S. Thompson and G. A. Turner, "Elevated Levels of Abnorm Cancer Sera," Br. J. Cancer, 1987, Vol. 56, Pages 605-610.	ally-Fucosylate	d Haptoglobins in
		C. Sekine, et al., "The Reactivity of Alpha-1 Antitrypsin with Usefulness in the Diagnosis of Neoplastic Diseases of the Liv Pages 371-375.		
		Jiri Mestecky, et al., "Defective Galactosylation and Clearand Etiopathogenic Factor in IgA Nephropathy," IgA Nephropath Pages 172-182.	ce of IgA1 Mole ny: The 25 th Yea	ecules as a Possible ar, 1993, Vol. 104,
		Peter W. Gyves, et al., "Changes in the Sialylation and Sulfat Congenital Hypothyroidism," Proc. Natl. Acad. Sci. USA, M		
Examiner Signature			Date Considered	

In place of PTO-1449	•. •		OF COMMERCE MARK OFFICE		Complete if Known
Form					
				Application Number	10/797,344
INFORMATION DISCLOSURE				Filing Date	March 10, 2004
STATEMENT BY APPLICANT (use as many sheets as necessary)				Applicant(s)	McAnalley et al.
				Art Unit	1654
				Examiner Name	Unknown
SHEET	8	of	10	Attorney Docket Number	23100.64

		OTHER PRIOR ART					
Examiner's	Cite	Include name of the author (in CAPITAL LETTERS), title of the artic	le, title of the item	, date, page(s), volume-			
Initials	No.	issue number(s), publisher, city/country w Barry P. Peters, et al., "O-Glycosylation of the α-Subunit Do		Assembly of			
		Chorionic Gonadotropin αβ Dimer in Human Malignant and					
		Endocrinology, 1989, Vol. 124, No. 4, Pages 1602-1612.	140mmangmant	rophobiast Cens,			
		James M. Roseman, et al., "The Effect of L-Focuse on Rat M		Growth, II In Vitro			
		Studies" Journal of Surgical Oncology, 1971, Vol. 3(1), Page	s 79-88.				
		Daniel Wolfe, et al., "The Effect of L-Focuse on Rat Mannar	y Tumor Growt	h I In Vivo Studies"			
		Journal of Surgical Oncology, 1971, Vol. 3(1), pages 73-77.	y Tulliol Glowi	n, i. m rivo studies			
		Journal of Surgical Officology, 1971, Vol. 5(1), pages 75-77.					
		F. E. Rosato, et al., "Continuous Intravenous Fucose Treatme	ent of Rat Mami	nary Tumor," Journal			
		of Surgical Oncology, 1972, Vol. 4, No. 2, Pages 94-101.					
		James L. Mullen, et al., "Continuous Intravenous Fucose The	rapy in Rat Ma	mmary Cancer II,"			
		Journal of Surgical Oncology, 1973, Pages 61-69.					
		Ryuichiro Nishimura, et al., "Free α Subunits of Glycoprotein Hormone with Dissimilar					
		Carbohydrates Produced by Pathologically Different Carcino					
		32 (4), Pages 463-472.	•	1 , ,			
		Kelly P. Kearse, et al., "Lymphocute Activation Induces Rap					
		Cytoplasmic Glycoproteins," Proc. Natl. Acad. Sci. USA, March 1991, Vol. 88, Pages 1701-1705.					
		Gordon D. Holt and Gerald W. Hart, "The Subcellular Distril	oution of Termi	nal <i>N</i> -			
		Acetylglucosamine Moieties," 1986, Vol. 261, No. 17, Pages					
		Gerald W. Hart, "The Role of Asparagine-Linked Oligosacch					
		Thymic Lymphocytes," Journal of Biological Chemistry, Jan	uary 1982, Vol.	257, No. 1, Pages			
		151-158.					
		B. M. Gesner and V. Ginsburg, "Effect of Glycosidases on the	e Fate of Trans	fused Lymphocytes."			
		Proceedings of the National Academy of Sciences, Septembe					
		755.					
		Deirdre R. Coombe and Christopher C. Rider, "Lymphocyte					
		for Anionic Polysaccharides in Lymphocyte Adhesion," Imm	unology Today	, 1989, Vol. 10, No.			
		9, Pages 289-291.					
_		Timothy A. Springer, "Traffic Signals for Lymphocyte Recir	culation and Le	ukocyte Emigration:			
		The Multistep Paradigm," Cell, January 1994, Vol. 76, Pages 301-314.					
		Ghislain Opdenakker, et al., "Cells Regulate the Activities of	Cytokines by C	Glycosylation," The			
		FASEB Journal, March 1995, Vol. 9, Pages 456-457.					
Examiner			Date				
Signature			Considered				

In place of PTO-1449 Form			OF COMMERCE MARK OFFICE		Complete if Known
FOIII				Application Number	10/797,344
INFORMATION DISCLOSURE				Filing Date	March 10, 2004
STATEMENT BY APPLICANT				Applicant(s)	McAnalley et al.
(u	se as many sheet	s as neces	ssary)	Art Unit	1654
				Examiner Name	Unknown
SHEET	9	of	10	Attorney Docket Number	23100.64

	where published appressive 85-Kilodalton Glycoprotein aigand for Recombinant Interleukin No. 29, Pages 13404-13407. Inity," Medical Immunology, Ninth on of Native Sex Steroid-Binding fect on the Steroid-Binding Activity," Itigosaccharides in the Subunit ding Protein," Molecular Factor Binding Protein-3 (IGFBP-3) for Processing of Cell-Bound IGFBP-3. Imman Norepinophrine Transporter			
Andrew V. Muchmore and Jean M. Decker, "An Immunosi Isolated From Human Pregnancy Urine is a High Affinity I 1α," The Journal of Biological Chemistry, 1986, Vol. 261, Tristram G. Parslow and Dorothy F. Bainton, "Innate Immunedition, 1997, Pages 25-42. Philip H. Petra, et al., "Complete Enzymatic Deglycosylation Iprotein (SBP or SHBG) of Human and Rabbit Plasma: Effection Protein Science, 1991, Vol. I, Pages 902-909. David R. Joseph, et al., "The Role of Asparagine-Linked Office Structure, Steroid Binding, and Secretion of Androgen-Bine Endocrinology, 1992, Pages 1127-1134. Cheryl A. Conover, "Glycosylation of Insulin-Like Growthis not Required for Potentiation of IGF-I Action: Evidence 3," Endocrinology, 1991, Vol. 129, No. 6, Pages 3259-326. Haley E. Melikian, et al., "Inability to N-Glycosylate the Heduces Protein Stability, Surface Trafficking, and Transport Recognition," Molecular Pharmacology, 1996, Vol. 50, Pages 160-401, "Molecular Pharmacology, 1996, Vol. 50, Pages 161-169. Leon A. Bach, et al., "Disappearance Rate of Glycosylate Growth Hormone: Influence on Biological Activity," Compl. No. 2, Pages 161-169. Sue M. Firth and Robert C. Baxter, "The Role of Glycosylate rogress in Growth Factor Research, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the Patrick L. Storring and December 1 and December 1 and December 2 and December	Interpressive 85-Kilodalton Glycoprotein igand for Recombinant Interleukin No. 29, Pages 13404-13407. Inity," Medical Immunology, Ninth on of Native Sex Steroid-Binding Sect on the Steroid-Binding Activity," Itigosaccharides in the Subunit Iding Protein," Molecular Factor Binding Protein-3 (IGFBP-3) for Processing of Cell-Bound IGFBP-3.			
1α," The Journal of Biological Chemistry, 1986, Vol. 261, Tristram G. Parslow and Dorothy F. Bainton, "Innate Immune Edition, 1997, Pages 25-42. Philip H. Petra, et al., "Complete Enzymatic Deglycosylating Iprotein (SBP or SHBG) of Human and Rabbit Plasma: Ef Protein Science, 1991, Vol. I, Pages 902-909. David R. Joseph, et al., "The Role of Asparagine-Linked O Structure, Steroid Binding, and Secretion of Androgen-Bin Endocrinology, 1992, Pages 1127-1134. Cheryl A. Conover, "Glycosylation of Insulin-Like Growth is not Required for Potentiation of IGF-I Action: Evidence 3," Endocrinology, 1991, Vol. 129, No. 6, Pages 3259-326 Haley E. Melikian, et al., "Inability to N-Glycosylate the H Reduces Protein Stability, Surface Trafficking, and Transper Recognition," Molecular Pharmacology, 1996, Vol. 50, Pages 100, Molecular Pharmacology, 1996, Vol. 50, Pages 100, Pages 1	No. 29, Pages 13404-13407. Inity," Medical Immunology, Ninth on of Native Sex Steroid-Binding fect on the Steroid-Binding Activity," ligosaccharides in the Subunit ding Protein," Molecular Factor Binding Protein-3 (IGFBP-3) for Processing of Cell-Bound IGFBP-3. Imman Norepinophrine Transporter			
Tristram G. Parslow and Dorothy F. Bainton, "Innate Immediation, 1997, Pages 25-42. Philip H. Petra, et al., "Complete Enzymatic Deglycosylatic Iprotein (SBP or SHBG) of Human and Rabbit Plasma: Ef Protein Science, 1991, Vol. I, Pages 902-909. David R. Joseph, et al., "The Role of Asparagine-Linked O Structure, Steroid Binding, and Secretion of Androgen-Bin Endocrinology, 1992, Pages 1127-1134. Cheryl A. Conover, "Glycosylation of Insulin-Like Growth is not Required for Potentiation of IGF-I Action: Evidence 3," Endocrinology, 1991, Vol. 129, No. 6, Pages 3259-326. Haley E. Melikian, et al., "Inability to N-Glycosylate the H Reduces Protein Stability, Surface Trafficking, and Transper Recognition," Molecular Pharmacology, 1996, Vol. 50, Pages Leon A. Bach, et al., "Human Insulin-Like Growth Factor Biochemical and Biophysical Research Communications, 1 L. R. Berghman, et al., "Disappearance Rate of Glycosylate Growth Hormone: Influence on Biological Activity," Comp. No. 2, Pages 161-169. Sue M. Firth and Robert C. Baxter, "The Role of Glycosylate rogress in Growth Factor Research, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the Patrick L. Storring and L. Patrick L. Storring and L. Patrick L. Storring and L. Patrick L. St	on of Native Sex Steroid-Binding Sect on the Steroid-Binding Activity," ligosaccharides in the Subunit ding Protein," Molecular Factor Binding Protein-3 (IGFBP-3) for Processing of Cell-Bound IGFBP-3.			
Edition, 1997, Pages 25-42. Philip H. Petra, et al., "Complete Enzymatic Deglycosylatic Iprotein (SBP or SHBG) of Human and Rabbit Plasma: Ef Protein Science, 1991, Vol. I, Pages 902-909. David R. Joseph, et al., "The Role of Asparagine-Linked O Structure, Steroid Binding, and Secretion of Androgen-Bin Endocrinology, 1992, Pages 1127-1134. Cheryl A. Conover, "Glycosylation of Insulin-Like Growth is not Required for Potentiation of IGF-I Action: Evidence 3," Endocrinology, 1991, Vol. 129, No. 6, Pages 3259-326. Haley E. Melikian, et al., "Inability to N-Glycosylate the H Reduces Protein Stability, Surface Trafficking, and Transper Recognition," Molecular Pharmacology, 1996, Vol. 50, Pages 100-100, "Molecular Pharmacology, 1996, Vol. 50, Pages 100-100, "Leon A. Bach, et al., "Human Insulin-Like Growth Factor Biochemical and Biophysical Research Communications, 1 L. R. Berghman, et al., "Disappearance Rate of Glycosylate Growth Hormone: Influence on Biological Activity," Compl. No. 2, Pages 161-169. Sue M. Firth and Robert C. Baxter, "The Role of Glycosylate rogress in Growth Factor Research, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the state of Glycosylate Communication, "Complete Communication, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the state of Glycosylate Communication, "Communication, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the state of Glycosylate Communication, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the state of Glycosylate Communication, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the state of Glycosylate Communication of Communi	on of Native Sex Steroid-Binding fect on the Steroid-Binding Activity," ligosaccharides in the Subunit ling Protein," Molecular Factor Binding Protein-3 (IGFBP-3) for Processing of Cell-Bound IGFBP-3. Jaman Norepinophrine Transporter			
Iprotein (SBP or SHBG) of Human and Rabbit Plasma: Ef Protein Science, 1991, Vol. I, Pages 902-909. David R. Joseph, et al., "The Role of Asparagine-Linked O Structure, Steroid Binding, and Secretion of Androgen-Bin Endocrinology, 1992, Pages 1127-1134. Cheryl A. Conover, "Glycosylation of Insulin-Like Growth is not Required for Potentiation of IGF-I Action: Evidence 3," Endocrinology, 1991, Vol. 129, No. 6, Pages 3259-326 Haley E. Melikian, et al., "Inability to N-Glycosylate the H Reduces Protein Stability, Surface Trafficking, and Transper Recognition," Molecular Pharmacology, 1996, Vol. 50, Pages 100-100, "Molecular Pharmacology, 1996, Vol. 50, Pages 100-100, "Human Insulin-Like Growth Factor Biochemical and Biophysical Research Communications, 100-100, 2, Pages 161-169. L. R. Berghman, et al., "Disappearance Rate of Glycosylate Growth Hormone: Influence on Biological Activity," Comp No. 2, Pages 161-169. Sue M. Firth and Robert C. Baxter, "The Role of Glycosylate rogress in Growth Factor Research, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the Patrick L. Storring, "Assaying Glycoprotein Hormones – the Protein Science of Storring, "Assaying Glycoprotein Hormones – the Patrick L. Storring, "Assaying Glycoprotein Hormones – the Protein Science of Storring, "Assaying Glycoprotein Hormones – the Protein Science of Science o	ligosaccharides in the Subunit ling Protein," Molecular Factor Binding Protein-3 (IGFBP-3) for Processing of Cell-Bound IGFBP-3.			
Structure, Steroid Binding, and Secretion of Androgen-Bin Endocrinology, 1992, Pages 1127-1134. Cheryl A. Conover, "Glycosylation of Insulin-Like Growth is not Required for Potentiation of IGF-I Action: Evidence 3," Endocrinology, 1991, Vol. 129, No. 6, Pages 3259-326. Haley E. Melikian, et al., "Inability to N-Glycosylate the H Reduces Protein Stability, Surface Trafficking, and Transper Recognition," Molecular Pharmacology, 1996, Vol. 50, Pages 100-100, Molecular Pharmacology, 1996, Vol. 50, Pages 100-100,	Factor Binding Protein-3 (IGFBP-3) for Processing of Cell-Bound IGFBP-3.			
is not Required for Potentiation of IGF-I Action: Evidence 3," Endocrinology, 1991, Vol. 129, No. 6, Pages 3259-326. Haley E. Melikian, et al., "Inability to N-Glycosylate the H Reduces Protein Stability, Surface Trafficking, and Transport Recognition," Molecular Pharmacology, 1996, Vol. 50, Pages 160. Leon A. Bach, et al., "Human Insulin-Like Growth Factor Biochemical and Biophysical Research Communications, 1 L. R. Berghman, et al., "Disappearance Rate of Glycosylate Growth Hormone: Influence on Biological Activity," Comp. No. 2, Pages 161-169. Sue M. Firth and Robert C. Baxter, "The Role of Glycosylate rogress in Growth Factor Research, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the state of the	for Processing of Cell-Bound IGFBP- 3. man Norepinophrine Transporter			
Reduces Protein Stability, Surface Trafficking, and Transport Recognition," Molecular Pharmacology, 1996, Vol. 50, Page Leon A. Bach, et al., "Human Insulin-Like Growth Factor Biochemical and Biophysical Research Communications, 1 L. R. Berghman, et al., "Disappearance Rate of Glycosylate Growth Hormone: Influence on Biological Activity," Comp. No. 2, Pages 161-169. Sue M. Firth and Robert C. Baxter, "The Role of Glycosylate rogress in Growth Factor Research, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the Recognition of				
Biochemical and Biophysical Research Communications, 1 L. R. Berghman, et al., "Disappearance Rate of Glycosylate Growth Hormone: Influence on Biological Activity," Comp. No. 2, Pages 161-169. Sue M. Firth and Robert C. Baxter, "The Role of Glycosylate rogress in Growth Factor Research, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the story of				
Growth Hormone: Influence on Biological Activity," Comp. No. 2, Pages 161-169. Sue M. Firth and Robert C. Baxter, "The Role of Glycosyla rogress in Growth Factor Research, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the story of				
rogress in Growth Factor Research, 1995, Vol. 6, Nos. 2-4, Patrick L. Storring, "Assaying Glycoprotein Hormones – the story of the sto				
	Patrick L. Storring, "Assaying Glycoprotein Hormones – the Influence of Glycosylation on Immunoreactivity," TBTech, December 1992, Vol. 10, Pages 427-432.			
Jacques U. Baenziger, "Editorial: Glycosylation: To What Endocrinology, 1996, Vol. 137, No. 5, Pages 1520-1522.	End for the Glycoprotein Hormones?"			
Bruce D. Weintraub, "TSH Immunoassay: Relationship Bo Nucl. Med. Biol., 1990, Vol. 17, No. 7, Pages 657-660.	tween Glycosylation & Bioactivity,"			
Examiner Signature	Date			

In place of PTO-1449 Form			OF COMMERCE MARK OFFICE		Complete if Known
				Application Number	10/797,344
INFO	RMATION D	DISCLO	OSURE	Filing Date	March 10, 2004
STAT	TEMENT BY	APPL	.ICANT	Applicant(s)	McAnalley et al.
(u:	se as many sheets	s as neces	ssary)	Art Unit	1654
				Examiner Name	Unknown
SHEET	10	of	10	Attorney Docket Number	23100.64

		OTHER PRIOR ART						
Examiner's	Cite	Include name of the author (in CAPITAL LETTERS), title of the article, title of the item, date, page(s), volume						
Initials	No.	issue number(s), publisher, city/country where published John W. Cassels, et al., "Reduced Metabolic Clearance of Acidic Variants of Human						
		Chriogonadotropin From Patients With Testicular Cancer," Cancer, 1989, Vol. 64, Pages 2313-2318.						
		Wolfgang Jelkmann, "Erythropoietin: Structure, Control of Production, and Function," Physiological Reviews, April 1992, Vol. 72, No. 2, Pages 449-489.						
		Alfredo Ulloa-Aguirre, et al., "Immunological and Biological Potencies of the Different Molecular Species of Gonadotrophins," Human Reproduction, 1988, Vol. 3, No. 4, Pages 491-501.						
		Eric D. Green and Jacques U. Baenziger, "Asparagine-Linked Oligosaccharides on Lutropin, Follitropin, and Thyrotropin," The Journal of Biological Chemistry, 1988, Vol. 263, No. 1, Page 36-44.						
		Eric D. Green, et al., "Differential processing of Asn-Linked Oligosaccharides on Pituitary Glycoprotein Hormones: Implications for Biologic Function," Molecular and Cellular Biochemistry, 1986, Vol. 72, Pages 81-100.						
		L. S1. Haro, et al., "Glycosylated Human Prolactin: Alterations in Glycosylation Pattern Modify Affinity for Lactogen Receptor and Values in Prolactin Radioimmunoassay," Journal of Clinical Endocrinology and Metablism, 1990, Vol. 71, No. 2, Pages 379-383.						
		Masa-aki-Hattori, et al., "Sialic Acid Moiety is Responsible for the Charge Heterogeneity and the Biological Potency of Rat Lutropin," Biochemical and Biophysical Research Communications, March 1985, Vol. 127, No. 2, Pages 501-508.						
		Eylard V. Van Hall, et al., "Immunological and Biological Activity of HCG Following Progressive Desialytation," February 1971, Vol. 88, Pages 456-464.						
Examiner Signature		Date Considered						